

**Practical-4:****activity\_main.xml:**

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <Button
        android:id="@+id/LengthConvert"
        android:layout_width="258dp"
        android:layout_height="107dp"
        android:layout_marginTop="200dp"
        android:text="@string/LengthConvert"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.503"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <Button
        android:id="@+id/CurrencyConvert"
        android:layout_width="258dp"
        android:layout_height="107dp"
        android:layout_marginBottom="200dp"
        android:text="@string/CurrencyConvert"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/LengthConvert"
        app:layout_constraintVertical_bias="1.0" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

**MainActivity.java:**

```
package com.example.practical_4;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;
```

```
import android.view.View;
import android.widget.Button;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        Button b1 = (Button) findViewById(R.id.LengthConvert);
        Button b2 = (Button) findViewById(R.id.CurrencyConvert);

        b1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                Intent i1 = new Intent(getApplicationContext(), LengthConvert.class);
                startActivity(i1);
            }
        });
        b2.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                Intent i2 = new Intent(getApplicationContext(), CurrencyConvert.class);
                startActivity(i2);
            }
        });
    }
}
```

**activity\_length\_convert.xml:**

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".LengthConvert">

    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="100dp"
```

```
android:text="@string/entertext"
android:textSize="34sp"
app:layout_constraintEnd_toStartOf="@+id/Meters"
app:layout_constraintHorizontal_bias="0.38"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent" />
```

<EditText

```
android:id="@+id/Meters"
android:layout_width="187dp"
android:layout_height="46dp"
android:layout_marginTop="100dp"
android:layout_marginEnd="28dp"
android:ems="10"
android:inputType="numberDecimal"
android:textSize="24sp"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintTop_toTopOf="parent"
tools:ignore="LabelFor,SpeakableTextPresentCheck"
android:importantForAutofill="no" />
```

<TextView

```
android:id="@+id/ResultLength"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginTop="100dp"
android:text="@string/Initial"
android:textSize="34sp"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/textView" />
```

<Button

```
android:id="@+id/CovertLength"
android:layout_width="298dp"
android:layout_height="73dp"
android:layout_marginTop="100dp"
android:text="@string/convert"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.495"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/ResultLength" />
```

</androidx.constraintlayout.widget.ConstraintLayout>

**LengthConvert.java:**

```
package com.example.practical_4;

import androidx.appcompat.app.AppCompatActivity;

import android.annotation.SuppressLint;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;

public class LengthConvert extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_length_convert);

        Button ConvertLength = (Button) findViewById(R.id.CovertLength);
        EditText meters = (EditText) findViewById(R.id.Meters);
        TextView tv1 = (TextView) findViewById(R.id.ResultLength);

        ConvertLength.setOnClickListener(new View.OnClickListener() {
            @SuppressLint("SetTextI18n")
            @Override
            public void onClick(View view) {
                float input = Float.parseFloat(meters.getText().toString());
                float inches = input * 39.37f;
                tv1.setText("Inches:" + inches);
            }
        });
    }
}
```

**activity\_currency\_convert.xml:**

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".CurrencyConvert">
```

```
<TextView
    android:id="@+id/textView3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="100dp"
    android:text="@string/entertext"
    android:textSize="34sp"
    app:layout_constraintEnd_toStartOf="@+id/USD"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent" />
```

```
<EditText
    android:id="@+id/USD"
    android:layout_width="187dp"
    android:layout_height="46dp"
    android:layout_marginTop="100dp"
    android:layout_marginEnd="28dp"
    android:ems="10"
    android:inputType="numberDecimal"
    android:textSize="24sp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    tools:ignore="LabelFor,SpeakableTextPresentCheck"
    android:importantForAutofill="no" />
```

```
<TextView
    android:id="@+id/Result"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="100dp"
    android:text="@string/Initial"
    android:textSize="34sp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/USD" />
```

```
<Button
    android:id="@+id/ConvertCurrency"
    android:layout_width="298dp"
    android:layout_height="73dp"
    android:layout_marginTop="100dp"
    android:text="@string/convert"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.495"
    app:layout_constraintStart_toStartOf="parent"
```

```
        app:layout_constraintTop_toBottomOf="@+id/Result" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

**CurrencyConvert.java:**

```
package com.example.practical_4;

import androidx.appcompat.app.AppCompatActivity;

import android.annotation.SuppressLint;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;

public class CurrencyConvert extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_currency_convert);

        Button ConvertLength = (Button) findViewById(R.id.ConvertCurrency);
        EditText meters = (EditText) findViewById(R.id.USD);
        TextView tv1 = (TextView) findViewById(R.id.Result);

        ConvertLength.setOnClickListener(new View.OnClickListener() {
            @SuppressLint("SetTextI18n")
            @Override
            public void onClick(View view) {
                float input = Float.parseFloat(meters.getText().toString());
                float inches = input * 75;
                tv1.setText("INR:" + inches);
            }
        });
    }
}
```

**Output:**

